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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,849	04/19/2000	TRUONG Q. NGUYEN	012560.0156-	4122
909	7590	02/03/2004	EXAMINER	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			PHILIPPE, GIMS S	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 02/03/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,849

Applicant(s)

NGUYEN ET AL.

Examiner

Gims S Philippe

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 24th 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-43 and 52-60 is/are allowed.
- 6) ☒ Claim(s) 44-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Response to Amendment

1. Applicant's amendment received on November 24th 2003 in which claims 2, 4, 9-10, 18, 37, 40, 42-43, 53, and 54 were amended, and claims 1 and 51 were canceled, has been fully considered and entered, but the arguments with respect to claims 44-47 are not persuasive.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in:

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or in

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 49-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Lennon (US 5937097) for the same reasons as previously set forth in the last office action mailed on May 21st 2003, paper no. 7.

Regarding claims 49-50, while the applicant argues that the examiner does not show the limitations, all of the limitations of the claims have been noted in Lennon col. 8, lines

Art Unit: 2613

55-67 and col. 9, lines 1-14. Particularly, the step of comparing the reference block to the incoming block to find the block difference measure is found in the Lennon's search region. The claimed "*subset*" is the block difference measure. In addition, the claimed step of traversing incrementally the related data subset within the search region to a position representing the best incremental match is Lennon's result of the repeated comparison as disclosed in col. 9, lines 1-54.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennon (US Patent no. 5,937,097) in view of Meany et al. (US Patent no. 5,850,482) for the same reasons as previously set forth in the last office action mailed on May 21st 2003, paper no. 7.

Regarding claims 44-46, and 48, the applicant argues that the limitations of the claims are not impliedly taught in the tensor product. In response to the examiner would maintains that the combination of Lennon and Meany teaches propagating remainders derived during encoding from a first filter path to a second filter path of the encoder

Art Unit: 2613

particularly in Meany col. 2, lines 58-64. In fact the wavelet transform step provides first and second filter path by using the Haar filtering in order to smooth the wave packets in order to generate a plurality of subsets. The tensor product will be obtained from two one-dimensional wave packets. The applicant should note that Meany particularly discloses in col. 2, lines 61-64, that *"the wavelet transform is equivalent to decomposing the image in terms of basis functions which are 2-D tensor products from the 1-dimensional wavelet and scaling filters"*.

As per claim 47, because Lennon did not limit the transforming to only wavelet, it is plausible to conclude that choosing the transform function to be a DCT instead of a wavelet is an obvious design choice not affecting the encoding process.

Allowable Subject Matter

6. Previously objected claims 4-6, 10-18, 40-43, and 53-54 are allowed based on the amendment submitted.

Amended claims 2-3, 7-9, 37-43, 52 are allowed based on the amendment submitted.

Claims 19-36, and 55-60 are allowed as previously mentioned in the last office action.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

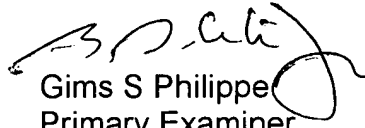
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gims S Philippe
Primary Examiner
Art Unit 2613

GSP

February 2, 2004